



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/575,000	04/07/2006	Norihide Mizoguchi	23697-008US1 / NF-2976	2283

  

26171	7590	03/12/2009
FISH & RICHARDSON P.C.		
P.O. BOX 1022		
MINNEAPOLIS, MN 55440-1022		

  

EXAMINER	
LOPEZ, FRANK	

  

ART UNIT	PAPER NUMBER
3745	

  

NOTIFICATION DATE	DELIVERY MODE
03/12/2009	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/575,000	<b>Applicant(s)</b> MIZOGUCHI ET AL.	
	<b>Examiner</b> F. Daniel Lopez	<b>Art Unit</b> 3745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 17 November 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) 1,3-5 and 8-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 1,3,8-10 and 12 is/are allowed.
- 6) ☐ Claim(s) 4,5 and 11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Response to Amendment***

Applicant's arguments filed November 17, 2008, have been fully considered but they are not deemed to be persuasive.

Applicant's arguments with respect to claims 4 and 5 have been considered but are deemed to be moot in view of the new grounds of rejection. The new grounds of rejection are necessitated by deleting the limitation of a value of an upper limit of the opening area is controlled based on a degree of the load pressure and a degree of the travel state (claim 4 last 4 lines) and adding the limitation that the communication area is controlled based on at least any one of the load pressure and the travel state, and is set equal to or less than the upper limit.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC § 112***

Claims 4, 5 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 4 line "the upper limit" has no antecedent basis.

Claims 5 and 11 are indefinite, since they depend from claim 4.

***Claim Rejections - 35 USC § 103***

Claims 4, 5 and 11 are rejected under 35 U.S.C. § 103 as being unpatentable over Saotome in view of Yamashita and Fertig et al. Saotome discloses a working vehicle comprising a directional control valve (30) controlling pressure oil supplied from a pump (20) to an actuator (50); a ride control valve (42), in a control block (40) controlling communication between an accumulator (53) and a pressure chamber (e.g. 52) of the actuator; wherein the lines connecting the directional control valve to the actuator are shown schematically as going through the control block; but does not specifically state that the ride control valve is arranged on the directional control valve in a laminated manner by internal piping; but does not disclose that a first pressure sensor detecting a load pressure of the actuator and a travel state detecting sensor detecting a travel state generates a signal, wherein at least one of the load pressure and the travel state is used

to control an opening area of the ride control valve. Inherently the communicating opening area must have an upper limit.

Yamashita shows first and second control valves (fb); wherein the second valve is part of a second control block; and wherein lines connected to the first control valve are shown schematically as going through the second control block (fig 3); that the schematic means that the second control valve is arranged on the first control valve in a laminated manner by internal piping (fig 4, column 1 line 36-38).

Since Yamashita teaches how the schematic of Saotome is physically assembled; then the schematic of Saotome means that the ride control valve is arranged on the directional control valve in a laminated manner by internal piping. If not, it would have been obvious at the time the invention was made to one having ordinary skill in the art to arrange the ride control valve of Saotome on the directional control valve in a laminated manner by internal piping, as taught by Yamashita, as a matter of engineering expediency.

Fertig et al teaches, for a working vehicle comprising a directional control valve (11) controlling pressure oil supplied from a pump (1) to an actuator (12); a ride control valve (75), controlling communication between an accumulator (21) and a pressure chamber (15) of the actuator; that a pressure sensor (90) detects a load pressure of the actuator and a travel state detecting sensor (92) detects a travel state; wherein the load pressure and the travel state are used to control an opening area of the ride control valve, for the purpose of automatically controlling the ride control valve when the speed is above a certain value and the pressure is below a maximum value (column 12 line 12-19).

Since Saotome and Fertig et al are both from the same field of endeavor, the purpose disclosed by Fertig et al would have been recognized in the pertinent art of Saotome. It would have been obvious at the time the invention was made to one having ordinary skill in the art to have a pressure sensor detect a load pressure of the actuator of Saotome and a travel state detecting sensor detect a travel state; wherein the load pressure and the travel state are used to control an opening area of the ride control valve, as taught by Fertig et al, for the purpose of automatically controlling the ride control valve when the speed is above a certain value and the pressure is below a maximum value.

**Conclusion**

Claims 1, 3, 8-10 and 12 are allowed.

Claim 5 would be allowable if rewritten in independent form including if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Lopez whose telephone number is 571-272-4821. The examiner can normally be reached on Monday-Thursday from 6:00 AM -4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Look, can be reached on 571-272-4820. The fax number for this group is 571-273-8300. Any inquiry of a general nature should be directed to the Help Desk, whose telephone number is 1-800-PTO-9199.

/F. Daniel Lopez/

F. Daniel Lopez  
Primary Examiner  
Art Unit 3745  
March 10, 2009